DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 70.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-005769
Date Inspected: 18-Mar-2009

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Japan Steel Works

OSM Arrival Time: 730
OSM Departure Time: 1730
Location: Muroran, Japan

CWI Name: Chung Fu Kuan

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Tower, Jacking, and Deviation Saddles

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Art Peterson was present during the times noted above for observations relative to the work being performed in Fabrication shop #4 at Japan Steel Works.

Welding Operation: Tower Saddle Segment T1-1

The QA Inspector observed that JSW personnel were preparing to rotate tower saddle segment T1-1 to complete the 2nd side of the partial-joint penetration groove welds on the structural steel rib plate to structural steel base plate on tower saddle segment T1-1. The QA Inspector observed that the 1st side welding was completed on weld joint no.'s 7Y5L-2, 7Y5L-3, 7Y6L, 7Y9L-1, 7Y9L-4. The Quality Control (QC) Inspector Mr. Chung Fu Kuan informed the QA Inspector that the welding will be resumed on the 2nd side of the partial-joint penetration groove weld on March 19, 2009.

Machining of Steel Segment: West Deviation Saddle Segment W2-E2

The QA Inspector observed that west deviation saddle segment W2-E2 was located in Machine Shop #2 to have the final machining performed. The final machining being performed on this date was drilling holes on the mating surfaces that will join west deviation saddle segment W2-E3.

Dimensional Inspection of Machined Surfaces: West Deviation Saddle Segment W2-E1 (After PWHT and Final Machining)

The QA Inspector observed on this date that the dimensional inspection was being performed on inside of the trough on west deviation saddle segment W2-E1. The dimensional inspection is being performed by an independent third party hired by JSW. The equipment being used is a 3D Laser tracking device manufactured by Leica. The QA Inspector observed that the dimensional inspection was in process at the end of the QA Inspectors' shift.

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Machining of Steel Segment: West Deviation Saddle Segment W2-E3 (After PWHT)

The QA Inspector observed that west deviation saddle segment W2-E3 was located in Machine Shop #2 to have the root face milled so during the fit-up operation of the W2-E3 steel section to W2-E3 cast section the gap will meet the mill to bear surface requirements per the approved shop drawings and the contract specifications. The QA Inspector observed that no machining was started on this date.

NDT of Steel Segment: West Deviation Saddle Segment W2-W1 (After PWHT)

The QA Inspector observed that after NIS NDT Inspector Mr. R. Kumagai performed magnetic particle testing (MPT) inspection, on the partial-joint penetration groove welds on the rib plate to stem plate and rib plate to base plate on west deviation saddle segment W2-E1; indications were observed that were marked up for repair by grinding. The QA Inspector observed that no work was being performed on this date to repair the indications marked up by NIS NDT Inspector Mr. R. Kumagai.

Welding of Steel Segment to Cast Segment: Tower Saddle Segment T1-2

The QA Inspector observed that tower saddle steel segment T1-2 fit to tower saddle cast segment T1-2 is being prepared (staging is being formed around the tower saddle segments) so the preheat operation can begin prior to the start of the welding operation. The preparation of the staging was in process at the end of the QA Inspectors' shift.

Fit-up of Steel Segment: West Deviation Saddle Segment W2-W2

The QA Inspector observed that JSW personnel were removing the loose mill scale and corrosion on the rib plates and stem plates prior to the fit-up operation (stem plate to base plate, rib plate to stem plate, and rib plate to base plate) of west deviation saddle steel segment W2-W2. The QA Inspector observed that the work was in process at the end of the QA Inspectors' shift.

NDT of Steel Segment: Tower Saddle Segment T1-3

The QA Inspector observed NIS NDT Inspector Mr. R Kumagai performing MPT inspection for information only on the prepared edges (bevels) of the rib plates and stem plates of tower saddle steel segment T1-3. The prepared edges were ground by JSW personnel previously at locations where scribe lines and punch marks were marked on the plates (assembly control lines) in preparation of fitting up tower saddle steel segment T1-3 to tower saddle cast section T1-3.

Unless otherwise noted, all observations reported on this date appeared to be in general compliance with applicable contract documents.

Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy, 510 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Peterson,Art	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer